March 12, 1955

Dean C. A. Elvehjem
Graduate School
University of Wisconsin

Dear Dr. Elvehjem:

You may recall our informal discussion a few weeks ago on the possibility of "germ-free animal" research at Wisconsin. You suggested that I make up a brief summary of my suggestion or inquiry that might be circulated to gauge the depth of local interest.

I am happybto submit such a statement and questionnaire. I do not know if the right questions are asked, or whether they are most felicitously phrased. At any rate, I hope you will make whatever use of it that you might find advisable. I had suggested that it be circulated from the graduate school rather than from myself; I would leave it to your judgment how it should be revised and referred to.

At an apprppriate time, it might be fruitful to consult Dean Bowers of the medical school, since one of the more urgent applications is in the problem of the role of enterogenic infection in radiation sickness.

Yours sincerely,

Joshua Lederberg
Professor of Genetics

Enc: "Germ-free Animal" Research Center at the
University of Wisconsin

"GERM-FREE ANIMAL" RESEARCH CENTER AT THE UNIVERSITY OF WISCONSIN

As is well known, biologists have become increasingly aware of the role of microorganisms associated with animals and man, not only in disease processes but also in normal development and function. Most animal experimentation relies upon the assumed approximate uniformity of associated microbes from one animal to another, but this factor is not always readily discounted.

In principle, the most direct approach to ruling out or to studying these effects would be the establishment of "pure cultures" of animal species as the starting point for more exact synthetic complexes, by analogy with the microbiologists' basic procedures. In fact, Reyniers and his associates at Notre Dame have established a laboratory for "germ free animal" research that at least points to the possibility of maintaining such cultures.

Regrettably, the Notre Dame group has not been able to make substantial progress beyond this technical accomplishment, possibly owing to a lack of broad interest and consultative support at that locale. If this kind of research were to be extended, it has been suggested that scarcely any other campus could outdo Wisconsin in the breadth and quality of connected interests to give direction to, and make the most effective use of such a research center. It has been suggested further that if this wide interest were coherently expressed and a definite collaborative program presented from the University, there would probably be little difficulty in obtaining the needed financial support.

It would be difficult to enumerate all of the fields of application; among the more obvious would be biochemistry (principally nutrition); physiology; infectious (and constitutional?) diseases; bacteriology and parasitology; animal and microbial genetics; pharmacology, chemotherapy, pathology, radiobiology.

This letter is therefore intended to sample the interest in such a program that might actually be expressed by research workers here. Your comment is cordially solicited on any aspect of such a program, or to any of the following questions:

Should a research center based on the "pure culture" of animals be established at Wisconsin? (What should this field or technique be called?) How extensive a program? Which species?

How should the center be organized? Can you suggest a qualified person (here or elsewhere) who could take primary responsibility for the intramural maintenance and research as well as for liaision?

What attraction would such a center have for your research program? Immediately? When? What sort of studies would you envisage, and what would be your particular needs?

You are invited to discuss this matter with any of your interested colleagues and to solicit their comments as well.